

~~PRELIMINARY ISSUE~~

Work Order ID 66706

Thursday, February 24, 2011 10:53:20 AM

Page 1

Item ID: D4038-7

Accept

Revision ID:

Item Name: Block

Start Date: 2/25/2011 Start Qty: 1.00

Required Date: 2/28/2011 Req'd Qty: 1.00

Reference:

Jan 11.02.24

Cust Item ID:

Customer:



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4038	C								

100

0.00



Bandsaw

Jeaspa Bandsaw

Memo

CUT BLANK 2.425" LONG

2.250" 11.02.24

0.00

only 11/02/24

1 0

105

0.00



HAAS 1

HAAS CNC vertical machine #1

Memo

Mill as per Dwg and Folio FA884

DWG REV: *C*

FOLIO REV: *AA*

DEBURR

0.00

only 11/02/24

1 0

Work Order ID 66706

Thursday, February 24, 2011 10:53:20 AM



Page 2

Item ID: D4038-7

Accept



Setup Start



Revision ID:

Stop



Item Name: Block

Start Date: 2/25/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 2/28/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110

QC2- Inspect parts off machine FAI/FAIB

0.00

Cmk 11/02/24



QC

Memo

0.00

Quality Control

120

QC8- Inspect parts - second check

0.00

-inspector to Rev C
Dwg with marked up
changes.

QC

Memo

0.00

Quality Control

130

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

1 0 JV 11/02/25

Work Order ID 66706

Thursday, February 24, 2011 10:53:20 AM



Page 3

Item ID: D4038-7

Accept



Setup Start



Revision ID:

Item Name: Block

Stop



Start Date: 2/25/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 2/28/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 BR 11-2-25

160

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

11/02/25

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/02/25

11/02/25

DEVIATION
only 11/02/25

~~POSITIVE RECALL~~
EFFECTIVE 11/02/25 AUTH U
RELEASED U DATE 11/02/25

Picklist Print

Thursday, February 24, 2011 10:53:17 AM

Page 1

Work Order ID: 66706



Parent Item: D4038-7



Parent Item Name: Block

Start Date: 2/25/2011

Required Date: 2/28/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: Ipp Rev:A New Issue 09-12-14 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.500X02.00 0		Purchased	No				f	12.7084		0.174737			



6061-T6 Bar 1.50 x 2.00

Location

Loc Qty

Loc Code

MAT

11.001

→ 114608

11.001

MAT10

1.7074

110167

1.7074

.175 and 11/02/24

DART AEROSPACE LTD		Work Order: 66706
Description: BLOCK		Part Number: D4038-7
Inspection Dwg: D4038, Rev: C		Page 1 of 1

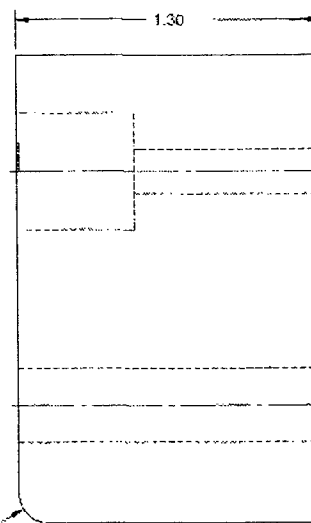
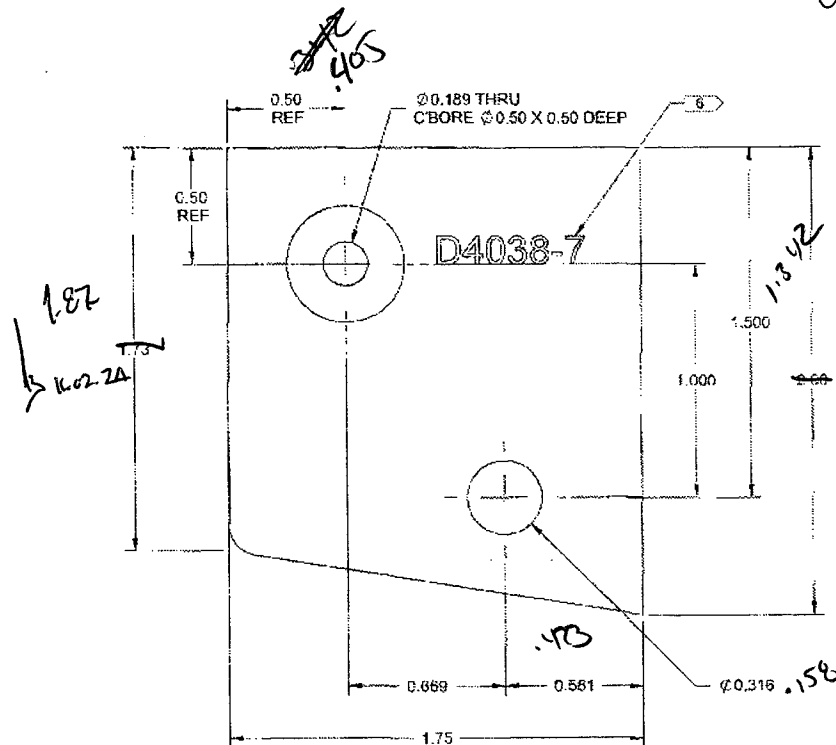
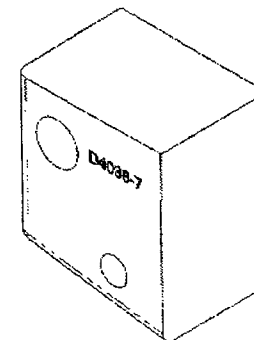
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.30	± 0.036	1.301	—		Vern ML-7	
R.13	± 0.030	R.125	—		Rad-gage REF	
2.14	± 0.030	2.143	—		Vern ML-7	
1.500	± 0.010	1.500	—		"	"
1.000	± 0.010	1.000	—		"	"
Ø.316	± 0.006 -0.001	Ø.318	—		"	"
.581	± 0.010	.581	—		"	"
.669	± 0.010	.669	—		"	"
1.75	± 0.030	1.751	—		"	"
1.87	± 0.030	1.870	—		"	"
Ø.189	± 0.005 -0.001	Ø.191	—		"	"
Ø.50 X .50	± 0.030	Ø.499 X .500	—		"	"
0.50 (Ref)	± 0.030	0.50"	✓		ED-00926	
0.50 (Ref)	± 0.030	0.50"	✓		ED-00926	

Measured by: <i>cmf</i>	Audited by: <i>S</i>	Prototype Approval:		
Date: 11/02/24	Date: 11/02/25	Date:		
<i>to Part C with marked changes</i>				
Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

w/o 66706



D4038-7 BLOCK

RELEASED
2011-01-31
MAD

- NOTES:
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4118)
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF DART SPEC M6061T6B
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 3.005 TO 0.010 MAX
 - 6) IDENTIFICATION: ENGRAVE P/N IN THIS AREA AS SHOWN TO MAX DEPTH
OF 0.010 IN 0.12 HIGH LETTERS WITH MIN RADIUS TOOL OF 0.015
 - 7) WEIGHT: 0.39 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4038	SHEET 9 OF 14
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	11.01.20	COPYRIGHT © 2009 BY DART AEROSPACE LTD	

Marc Bellavance

From: Marc Bellavance <mbellavance@dartaero.com>
Sent: February 24, 2011 11:13 AM
To: 'Jan Zurbuchen (Lauterbrunnen)'
Subject: RE: aft fittings

Hi Jan,

No problem at all. I just got to talk to our chief engineer and here is what we will do: we will manufacture custom made blocks per the changes you are requesting and will send to you. It is my understanding that you should receive those blocks early next week. Once you do receive them, it would be appreciated if you could provide feedback on their installation. We would then update our manufacturing drawings accordingly.

To answer your last question, there are one other kit in service and two customers who have purchased the conversion kits. None have reported this concern or problem as of yet but we will enquire by contacting them once you are satisfied with the new blocks.

Thanks again.

Best regards,

Marc Bellavance
Technical/Shop Support
DART aerospace Ltd.

Tel: 613-632-5200 Ext. 243

Cel: 613-676-0992

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

Web: www.dartaero.com

Product Documentation: Verify Revision Status/Download [HERE!](#)



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From: Jan Zurbuchen (Lauterbrunnen) [mailto:jzurbuchen@air-glaciers.ch]
Sent: February 24, 2011 9:05 AM
To: Marc Bellavance
Subject: AW: aft fittings

Hi Marc,

Thank you for your answer.

What I am trying to explain with the sentence in my last message(red) was only to declare the problem in general. This is only due to my bad mention explaining in English.

Perhaps for the future production, it is necessary to length all aft fitting blocks with approximately 3 mm, to fit to all Helicopters.

But of course, we really would like to get blocks in the exact dimensions we transmitted, this should be possible by your production line/engineering.

Do you know, how much kits in this new design are now installed in the world? I'm wondering that your company never heart before something concerning this problem.

Thanks a lot

Greetings from snowy Switzerland

Jan Zurbuchen

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Tel. +41 (0)33 8 560 560
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agl@airglaciers.ch
www.airglaciers.ch/lauterbrunnen

Von: Marc Bellavance [<mailto:mbellavance@dartaero.com>]
Gesendet: Donnerstag, 24. Februar 2011 14:45
An: Jan Zurbuchen (Lauterbrunnen)
Cc: 'Daniel Hofer, HELIPOOL Europe'; Olivier Constantin (mec Sion)
Betreff: RE: aft fittings

Hello Jan,

Thank you for providing *DART* with this information, we truly appreciate your help.

Seems like making new blocks is inevitable and to this effect, I'm wondering if it would be acceptable for Air-Glaciers SA if all the new blocks would be lengthen by 3 mm as opposed to have two lengthen by 3.6 mm, one by 3.4 mm and the other one by 3.0 mm. Please let me know.

I have forwarded your message and attachments to Engineering for their review and will let you know very shortly the course of our actions.

Thanks again!

Best regards,

Marc Bellavance
Technical/Shop Support
DART aerospace Ltd.
Tel: 613-632-5200 Ext. 243
Cel: 613-676-0992
Fax: 613-632-9311
E-mail: mbellavance@dartaero.com

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From: Jan Zurbuchen (Lauterbrunnen) [mailto:jzurbuchen@air-glaciers.ch]

Sent: February 24, 2011 4:40 AM

To: mbellavance@dartaero.com

Cc: Daniel Hofer, HELIPOOL Europe; Olivier Constantin (mec Sion)

Subject: WG: aft fittings

Hello Marc,

I'm sorry, but I wasn't in the office yesterday evening, so that's the reason I didn't answer you again. And the first mail with the drawings did not forwarded to me.

Concerning the dimension please refer to the attached copies with the corrections.

As you can see, the corrections of the blocks should be lengthened parallel to the existing dimension.

Perhaps for the future production, it is necessary to length all aft fitting blocks with approximately 3 mm, to fit to all Helicopters.

In the Hope, that this will help you, I remain.

Best regards,

Jan Zurbuchen

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agl@airglaciers.ch
www.airglaciers.ch/lauterbrunnen

Von: Marc Bellavance [mailto:mbellavance@dartaero.com]

Gesendet: Mittwoch, 23. Februar 2011 22:37

An: Jan Zurbuchen (Lauterbrunnen); jzurbuchen@airglaciers.ch

Betreff: RE: aft fittings

Hello Jan,

It seems to me like the holes are located per drawing which leaves one possible solution for this and we will need your help to achieve that.

Please have a look at the attached picture and PDF files. Those are the same as I have sent you earlier today attached here for convenience.

In reference to the JPEG, can you please confirm that this will solve the fitting issue?

Also, and in reference with the PDF file, can you please confirm dimensions "A", "B", "C", and "D" that are required to increase the length on the blocks?

Thank you for your patience and assistance.

Best regards,

Marc Bellavance
Technical/Shop Support
DART aerospace Ltd.

Tel: 613-632-5200 Ext. 243

Cel: 613-676-0992

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

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From: Jan Zurbuchen (Lauterbrunnen) [<mailto:jzurbuchen@air-glaciers.ch>]

Sent: February 23, 2011 12:09 PM

To: mbellavance@dartaero.com

Subject: aft fittings

Hello Marc,

You can see the distance (in mm) of the holes on the pictures. The same distances are on the RH aft fitting.

So you can self verify with the drawings of the aft fittings.

Best regards

Jan Zurbuchen

=====
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